1. A data entry system comprising;

a number of predefined input signals provided by interacting with the input means of an object, including predefined types of interaction provided with a number of keys, such as physical or virtual keys, corresponding to an electronic device for at least entering arbitrary characters wherein,

said data entry system uses a number of symbols including at least the letters of the alphabet of at least one language and wherein said symbols are assigned to said input signals such that at least two of said letters are assigned to at least one of said input signals, and wherein a symbol assigned to an input signal is entered by a procedure of input including:

providing said input signal; and

providing a speech information corresponding to said symbol for selecting said symbol among the symbols that are assigned to said input signal, wherein said speech information is detected and analyzed based on at least one of, a user's voice and a user's lip movements, and wherein said data entry system uses at least one database of words such that in order to enter a word of said a least one database a user uses one of at least a first and a second methods of input wherein,

a first method includes combining information corresponding to said word, wherein said combined information includes:

a first information including entering at least one character such as a letter of said word through said procedure of input, and

a second information including providing the input signals corresponding to at least some of the other characters of said word without providing speech; and

said second method including providing information including the input signals corresponding to substantially all of the characters of said word without providing a speech, wherein the system compares said information with the information corresponding to the words of said database and proposes a corresponding word.

- 2. The data entry system according to claim 1, wherein at least the letters having ambiguously resembling speech are assigned separately from each other to different input signals.
- 3. The data entry system according to claim 1, wherein a symbol such as a character other than a letter may be entered by providing a predefined type of interaction with said input signal without speaking.
- 4. The data entry system according to claim 1, wherein substantially all of said letters are assigned to four of said input signals.

## 5. A data entry system comprising:

a number of predefined input signals provided by interacting with the input means of an object including predefined types of interaction provided with a number of keys, such as physical or virtual keys, corresponding to an electronic device for at least entering arbitrary characters wherein,

said data entry system uses a first type of symbols including at least the letters of the alphabet of at least one language and a second type of symbols substantially each including a portion of a word, such as a chain of characters generally corresponding to a syllable of a word of a language, wherein said symbols correspond to said input signals such that at least two of said letters are assigned to at least one of said input signals, and wherein a symbol corresponding to said at least one input signal is entered by a procedure of input including:

providing said at least one input signal; and

providing a speech information corresponding to said symbol for selecting said symbol among the symbols that are represented by said at least one input signal wherein said speech information is detected and analyzed based on at least one of, a user's voice and a user's lip movements.

- 6. The data entry system according to claim 5, wherein said data entry system uses a number of words wherein each of said words includes at least one of said symbols such that in order to enter one of said words a user provides information corresponding to the symbols of said word through said procedure of input.
- 7. The data entry system according to claim 5, wherein said data entry system uses a number of words wherein each of said words is composed of at least one of said symbols, wherein in order to enter one of said words a user provides a combined information corresponding to said word, wherein said combined information includes:
- a first type of information including entering precisely at least one of the symbol of said word through said procedure of input; and
- a second type of information including providing the input signals corresponding to at least some of the other characters of said word without providing a corresponding speech.
- 8. The data entry system according to claim 5, wherein said at least some of the other characters of said word is substantially all of the other characters of said word.
- 9. The data entry system according to claim 5, wherein said providing at least an input signal

corresponding to a symbol of the second types of symbols is providing an input signal corresponding to a character, generally the beginning character, of said symbol and speaking said symbol.

- 10. The data entry system according to claim 5, wherein said providing at least one input signal corresponding to a symbol of the second types of symbols is providing the input signals corresponding to substantially all of the characters of said symbol and speaking said symbol.
- 11. The data entry system according to claim 5, wherein said data entry system further comprises a third group of symbols including the complete words of a language, wherein each of said words generally comprises one syllable.
- 12. The data entry system according to claim 5, wherein at least the letters having ambiguously resembling speech are separately from each other assigned to different input signals.
- 13. The data entry system according to claim 5, wherein a symbol such as a character other than a letter may be entered by providing a predefined type of interaction with said input signal without speaking.
- 14. The data entry system according to claim 5, wherein each of two different types of interaction with an input means provides a different input signal, wherein a first input signal corresponds to the entry of a character such as a letter, and a second input signal corresponds to the entry of a portion of a word.
- 15. The data entry system according to claim 5, wherein substantially all of said letters are assigned to four of said input signals.
- 16. The data entry system according to claim 15, wherein said substantially all of said portions of words are represented by said four input signals.
- 17. A data entry system comprising:

a number of predefined input signals provided by interacting with the input means of an object including predefined types of interaction provided with a number of keys such as physical or virtual keys, corresponding to an electronic device, for at least entering arbitrary characters wherein,

said data entry system uses a number of symbols including at least the letters of the alphabet of at least one language and wherein said symbols are assigned to said input signals such that at least two of

said letters are assigned to at least one of said input signals and wherein,

said data entry system uses a number of words wherein each of said words includes at least one of said symbols, wherein in order to enter one of said words a user provides at least the input signals corresponding to the symbols of said word and the system compares said sequence of input signals with the input signals corresponding to each of at least some of said words and proposes a corresponding word and wherein,

the input means to which substantially all of said letters of a language are assigned are arranged such that one finger tip of said user may touch substantially all of them simultaneously.

- 18. The data entry system according to claim 17, wherein at least the input means to which said letters are assigned, are split into two groups wherein each group is used by the finger of a different user's hand.
- 19. The data entry system according to claim 17, wherein at least the input means to which said letters are assigned are split into two groups and are disposed on opposite sides of an electronic device.
- 20. The data entry system according to claim 17, wherein further a symbol assigned to an input signal is entered by a procedure of input including;

providing said input signal; and

providing a speech information corresponding to said symbol for selecting said symbol among the symbols that are assigned to said input signal, wherein said speech information is detected and analyzed based on at least one of a user's voice and a user's lip movements.

21. The data entry system according to claim 17, wherein further a symbol assigned to an input signal is entered by a procedure of input including:

providing said input signal; and

providing a speech information corresponding to said symbol for selecting said symbol among the symbols that are assigned to said input signal, wherein said speech information is detected and analyzed based on at least one of a user's voice and a user's lip movements;

and wherein said data entry system uses at least one database of words such that in order to enter a word of said at least one database a user uses one of at least a first and a second methods of input wherein:

a first method of input includes combining information corresponding to said word, where said combined information includes

a first information including entering at least one character such as a letter of said word through said procedure of input; and

a second information including providing the input signals corresponding to at least some of the other characters of said word without providing a speech;

a second method of input includes providing information including the input signals corresponding to substantially all of the characters of said word without providing a speech, wherein the system compares said information with the information corresponding to the words of said database and proposes a corresponding word.

- 22. The data entry system according to claim 17, wherein at least the letters having ambiguously resembling speech are separately from each other assigned to different symbols.
- 23. The data entry system according to claim 17, wherein substantially all of said letters are assigned to four of said input signals.

## 24. A data entry system comprising:

a number of predefined input signals provided by interacting with the input means of an object including predefined types of interaction provided with a number of keys such as physical or virtual keys, corresponding to an electronic device for at least entering arbitrary characters wherein,

said data entry system uses a number of symbols including at least the letters of the alphabet of at least one language and wherein said symbols are assigned to said input signals such that at least two of said letters are assigned to at least one of said input signals and wherein,

said data entry system uses a number of words wherein each of said words is composed of at least one of said symbols, wherein in order to enter one of said words a user provides at least the input signals corresponding to the symbols of said word and the system compares said sequence of input signals with the input signals corresponding to each of at least some of said words and proposes a corresponding word and wherein,

at least the input means to which said letters are assigned are split into two groups wherein each group is used by the finger of a different user's hand.

- 25. The data entry system according to claim 24, wherein at least the input means to which said letters are assigned are split into two groups and are disposed on opposite sides of an electronic device.
- 26. The data entry system according to claim 24, wherein further a symbol assigned to an input

signal is entered by a procedure of input including:

providing said input signal; and

providing a speech information corresponding to said symbol for selecting said symbol among the symbols that are assigned to said input signal, wherein said speech information is detected and analyzed based on at least one of a user's voice and a user's lip movements.

27. The data entry system according to claim 24, wherein a further symbol assigned to an input signal is entered by a procedure of input including:

providing said input signal; and

providing a speech information corresponding to said symbol for selecting said symbol among the symbols that are assigned to said input signal, wherein said speech information is detected and analyzed based on at least one of a user's voice and a user's lip movements; and

wherein said data entry system uses at least one database of words such that in order to enter a word of said a least one database a user uses one of at least a first and a second methods of input, wherein:

- a first method of input includes combining information corresponding to said word, wherein said combined information includes:
- a first information including entering at least one character such as a letter of said word through said procedure of input; and
- a second information including providing the input signals corresponding to at least some of the other characters of said word without providing speech;
- a second method o input includes providing information including the input signals corresponding to substantially all of the characters of said word without providing a speech, wherein the system compares said information with the information corresponding to the words of said database and proposes a corresponding word.
- 28. The data entry system according to claim 24, wherein at least the letters having ambiguously resembling speech are separately from each other assigned to different input signals.
- 29. The data entry system according to claim 24, wherein substantially all of said letters are assigned to four of said input signals.
- 30. A data entry system comprising;
- a number of predefined input signals provided by interacting with the input means of an object, including predefined types of interaction provided with a number of keys, such as physical or virtual keys,

corresponding to an electronic device for at least entering arbitrary characters wherein,

said data entry system uses a first type of text components including at least the letters of the alphabet of at least one language and a second type of text components generally each including a portion of a word, such as a chain of characters generally corresponding to a syllable of a word of a language, wherein said first text components are assigned to said input signals such that at least two of said letters are assigned to at least one of said input signals, and wherein a text component of the second group of text components is entered by a procedure of input including:

providing the input signals corresponding to at least two of its characters; and providing a speech information corresponding to said text component for selecting said text component among the text components that are represented by said provided input signals, wherein said speech information is detected and analyzed based on at least one of a user's voice and a user's lip movements.

- 31. The data entry system according to claim 30, wherein said second group of text components include the word of a language having one syllable.
- 32. The data entry system according to claim 30, wherein said second group of text components includes portions of a word, where said portions of a word have more than one syllable.

## **ABSTRACT**

A data input system having a keypad defining a plurality of keys, each key contains at least one symbol of a group of symbols. The group of symbols is divided into subgroups each having at least one of alphabetical symbols, numeric symbols, and command symbols, where each subgroup is associated with at least a portion of a user's finger. A finger recognition system is in communication with at least one key, where the key has at least a first symbol from a first subgroup and at least a second symbol from a second subgroup, The finger recognition system is configured to recognize the portion of the user's finger when the finger interacts with the key so as to select the symbol on the key, corresponding to the subgroup associated with the portion of the user's finger.